Request to Archive
With The National Centers for Environmental Information
For Outgoing Longwave Radiation (OLR) Level 2 Granules from IASI
Provided by OSPO

2012-04-23

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

1. Who is the primary point of contact for this request?

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2. Name the organization or group responsible for creating the dataset.

3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.

The data to be archived are fluxes of Outgoing Longwave Radiation (OLR) derived from the IASI instrument (aboard the MetOp series of satellites). Associated with these flux data are quality and geolocation information. The input data are the IASI L1C radiance data (currently archived at CLASS under an existing SA). The data files are granules alternating between 176 and 184 seconds in length. The spatial coverage is global with a resolution of 25km. As MetOp is a polar orbiting satellite, temporal coverage is continuous with the same position on the Earth being seen every 28 days.

4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)

From 2012-08-15
Ongoing as continuous updates to the data record

5. Edition or version number(s) of the dataset:

6. Describe the level to which the data are processed. For example, are these unprocessed raw observations, derived parameters, quality controlled or inter-calibrated data, etc.?

The input data are IASI L1C data. L1C are calibrated, geolocated, and apodized radiances. The IASI OLR processing integrates these L1C radiance data and applies a regression tuning to produce a single OLR for each IASI field of view (FOV). These OLR data are considered to be a level 2 data product. The input and output data are at the same spatial and temporal resolution, but spectrally they are different because OLR is integrated.

7. Approximate date when the dataset was or will be released to the public:

8. Who are the expected users of the archived data? How will the archived data be used?

The user is the Climate Prediction Center. These data would be used for research and reprocessing efforts. The

original request to produce the product operationally states that, "OLR with CERES like quality or better in the METOP orbit will provide important information on diurnal signal for model verification and monitoring and will also provide a backup capability in case of a problem with CERES. The verification is fundamental because it provide us with important guidance for predicting tropical influences on mid latitude weather patterns."

9. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?

CPC is currently using an identical product that STAR also developed for the CERES instrument. The user is currently receiving sample IASI OLR products and has expressed satisfaction with the product.

10. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?

11. List the input datasets and ancillary information used to produce the data.

The input data are the IASI L1C radiance data (currently archived at CLASS under an existing SA). The data files are granules alternating between 176 and 184 seconds in length. IASI resides on the MetOp-A platform, but will also be present on the MetOp-B and C platforms.

12. List web pages and other links that provide information on the data.

The metadata are to be ISO-19115 compliant. The metadata will inserted into the header of the netCDF file as global variables. This approach was developed between STAR, NDE, and Ted Habermann at NGDC. The data content of the files is CF-compliant.

13. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.

1. An IASI products Users Manual is available, but it has to be requested from the Product Area Lead (PAL). The PAL is Awdhesh Sharma (Awdhesh.Sharma@noaa.gov) at OSPO.

14. Indicate the data file format(s).

1. netCDF

15. Are the data files compressed?

No

16. Provide details on how the files are named and how they are organized (e.g., file_name_pattern_YYYYMM.tar in monthly aggregations).

The data files are produced in netCDF using library version 3.6.1. The files contain CF-compliant headers. The current file name convention is: IASI-OLR_V1R0_M02_$YYYYMMDDHHMMSSZ_$YYYYMMDDHHMMSSZ.nc

where:
"_" - these are the field delimiters
IASI-OLR - Product name
V1R0 - Version 1, Release 0
M02 - MetOp 2 (aka MetOp-A)
$YYYYMMDDHHMMSSZ - first string is the starting date and time followed by the "Z" (the Z indicates time is in

UTC)
$YYYYMMDDHHMMSSZ - this second string is the ending data and time followed by the "Z".

I should mention that we are flexible on the file name format.

17. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?

For sample data please contact me (Thomas King - Thomas.S.King@noaa.gov). I can supply data continuously on a server (ftp2.orbit.nesdis.noaa.gov). The server can be accessed via anonymous ftp.

18. What is the total data volume to be submitted?

Historic Data: all historic data or data submitted as a completed collection.

Total Data Volume:
Number of Data Files:

19. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.

No additional updates, revisions or replacement data are anticipated.

20. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location:	NSOF, Suitland, Maryland
System Name:	IASI Product Processing System
System Owner:	NESDIS>OSDPD>OSPO
Additional Information:	Add comments as needed on applicable data types, etc.

21. What are the possible methods for submitting the data to NCEI? Select all that apply.

1. FTP PUSH

22. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.

1. Staged HTTP/FTP

23. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?

No known constraints apply to the data.

24. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.

These data will be produced operationally (at OSPO) for the Climate Predication Center (CPC). The CPC contact is Craig Long. He has specifically requested that these data be archived at NCDC. They would like to retain these data for research and reprocessing efforts.

25. Are the data archived at another facility or are there plans to do so? Please explain.

No

26. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?

These data are produced operationally by the NOAA IASI processing system at OSPO for the Climate Predication Center (CPC). The CPC contact is Craig Long. He has specifically requested that these data be archived at NCDC.

27. Do you have a data management plan for your data?
No

28. Have funds been allocated to archive the data at NCEI?
No

29. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.

30. Is there a desired deadline for NCEI to archive and provide access to the data?
Archive by:
Accessible by:

31. Add any other pertinent information for this request.
Please contact me (Thomas King - Thomas.S.King@noaa.gov) for any addition questions.